

Nitrogen Over-Voltage on Platinum During
Electrolysis of Solutions in Liquid Ammonia,
by N. M. Gessler, V. A. Pleskov, 9 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXIV, No 4,
1950, pp 445-454.

OTS TT-63-20508(16pp)
Sci Mus Lib 53/1487

5956

Scientific - Chemistry
CTS/DEX

Theory of the Vapor Separation Process by Freezing
Out, by A. G. Amelin, Z. B. Borodastova, 10 pp.

RUSSIAN, no per, Zhur Fiz Khim, Vol XXIV, No 5,
1950, pp 529-533.

Morris D. Friedman
\$5.00

Scientific - ~~Physics~~
Chemistry
CTS 73/Oct 1955

27,899

Study of Anode Overvoltage in the Liberation of Oxygen
on a Nickel Electrode in an Alkali Solution, by V. N.
Fizelskiy, and Ya. I. Tur'yan.

Full translation.

RUSSIAN, Iper, Zhur Fiz Khim, Vol XXIV, No 5, (USSR),
1950, pp 567-573.

RT-1529
AEC Tr 1247

Scientific - Chemistry

Also ERB THIR
CIA 769676

Some Patterns of Behavior in the Formation of
Binary-System Constitution Diagram Types, by S. D.
Gramakov, 12 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXIV, 1950,
pp 641-649.

AEC Tr-4523

Sci . Phys
Jun 61

154,781

Godnev, I. N. and Sverdlin, A. S.
THERMODYNAMIC FUNCTIONS OF DICHLOROBEN-
ZENES. [1962] 15p.
Order from ATS \$18.95

ATS-04P59R

Trans. of Zhur[na]l Fiz[ichesko]i Khim[i] (USSR)
1950, v. 24, no. 6, p. 670-682.

DESCRIPTORS: *Benzenes, *Chlorides, *Thermo-
dynamics.

(Physics--Thermodynamics, TT, v. 8, no. 4)

62-17187

- I. Godnev, I. N.
- II. Sverdlin, A. S.
- III. ATS-04P59R
- IV. Associated Technical
Services, Inc., East
Orange, N. J.

ATS/AT-3407

Office of Technical Services

Vibrational Frequency of the Atoms in the Fluorine Molecule, Thermodynamic Functions of Fluorine and the Equilibrium Constant F_2 in the Temperature Interval From 298.1 to 5000°K, by K. V. Butkov, P. B. Rozenbaum.

RUSSIAN, no per, Zhur Fiz Khim, Vol XXIV, 1950, pp 706-713.

~~NOT RECORDED~~

ABC Tr 460

Sc Tr Center ~~4~~ 203

Scientific - Physics

17,782

The Problem of Heat Conductivity of Binary Liquid
Systems, by N. D. Vargaftik, V. V. Kiselevskiy.

RUSSIAN, no per, Zhur Fiz. Khim., Vol XXIV, No 6,
1950, pp 718 - 720.

AEC Tr 5 19

Sci - Chemistry

July 1951 CTS

(NY-4838)

Detonation of Hydrogen-Air Mixtures, by A. M.
Brodskiy, Ya. B. Zel'dovich, 13 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXIV, No 7,
1950, pp 778-785.

JPRS 7259

SLA 60-17378

Sci - Phys

Jan 61

136,519

Potentials of Hydrogen Liberation (Over-Voltage)
in Acid Solutions, ~~7~~ by A. G. Pecherskaya, V. V.
Stender, 8 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXIV, No 7,
1950, pp 856-859.

SIA R-1499

Jul 58

69,991

Neutral Electrode in the Electrochemistry of
Molten Salts, by Yu. K. Delimarskiy, 13 pp.

RUSSIAN, no par, Zhur Fiz Khim, Vol XXIV,
No 7, 1950, pp 875-880.

Sci Tr Center RT-2830

OTS TT-62-13996

Scientific - Chemistry

Jan 56 CTS/dex

30,209

Gas Absorption in the Presence of Surface Active
Materials. II. On the Role of Adsorbed Film of
Surface-Active Materials in the Absorption Process,
by A. N. Ternovskaya, A. P. Belopol'skiy.

RUSSIAN, per, Zhur Fiz Khim, Vol XXIV, 1950,
pp 981-987.

MLL M. 4287

Sci - Chem

194,030

Apr 62

The Effect of Small Additions of a Foreign Impurity
on the Catalytic Activity of Ionic Catalysts, by
F. F. Vol'kenshtein

RUSSIAN, per, Zhur Fiz Khim, Vol XXIV, No 9,
1950, pp 1068-1082.

AEC Tr 1165

ET 3482

Scientific - Chemistry

Vol'kenshteyn, F. F.
DE INVLOED VAN DE TOEVOEGING VAN KLEINE
HOEVEELHEDEN VAN EEN VREEMD BIJMENGSEL
OP DE KATALYTISCHE ACTIVITEIT VAN IONAIERE
KATALYSATOREN (Effect of small quantities of
impurities on the catalytic activity of ionic catalysts).
26 p. 2 refs. MTWL: 454 (Text in Dutch).
Order from OTS or ETC \$2.37 61-17043

Trans. of Zhurnal Fizicheskoi Khimii (USSR) 1950,
v. 24, p. 1068-1082.

DESCRIPTORS: *Catalysts, *Ionization, Chemical
Impurities, Theory.

61-17043

- I. Vol'kenshteyn, F. F.
- II. MTWL-454
- III. Stichting Moeilijk
Toegankelijke Wetenschap-
pelijke Literatuur.

Office of Technical Services

An Investigation of the Plastic Flow of Poly-
butadiene, by G. M. Bartenev, 19 pp.

RUSSIAN, per. Zhur Fiz Khim, Vol XXIV, No 10, 1950,
pp 1210-1218.

Sci Trans Center RT-730

Chemistry

Scientific -- ~~Engineering~~

CTS/DEX

14,052

Stabilization of Excited Molecules of
Aromatic Compounds During Collisions,
by B. S. Neporent, 27 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXIV,
No 10, 1950, pp 1219-1234.

Sci - Mus Lib 55/3407

Natl Res Council 7T-563

Sci - Chemistry, Physics

31,930

The Kinetics of the Transformation of Polymorphous Modifications of Ammonium Nitrate.

1. The General Character of the Kinetics of the Transformation of Modification IV to Modification III., by B. V. Erofeyev, N. I. Mitskevich, 19 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol X XXIV, No 10, 1950, pp 1235-1251.

Sci Mus Lib No 56/2537

Sci - Physics

42, 836

Mchedlov-Petrosyan, O. P.
THERMODYNAMIC STUDY OF SOLID PHASE RE-
ACTIONS IN MAGNESIUM SILICATE SYSTEMS. [1963]
7p (figs omitted).

Order from K-H \$7.00

K-H 3980 b

Trans. of Zhurnal Fizicheskoi Khimii (USSR) 1950,
v. 24, no. 11, p. 1299-1301.

DESCRIPTORS: *Silicates, *Magnesium compounds,
Chemical reactions, Phase studies, Solids,
Thermodynamics

(Physics--Thermodynamics, TT, v. 11, no. 2)

TT-63-22806

- I. Mchedlov-Petrosyan, O. P.
- II. K-H-3980-b
- III. Kresge-Hooker Science
Library Associates,
Detroit, Mich.

Office of Technical Services

Kinetics of Ammonia Synthesis of High
Pressures, by M. I. Temkin, 16 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXIV,
No 11, 1950, 1312-1325.

Asso Tech Svc 82 J 15 K

Sci

OTS 62-16039.

Aug 58

69, 797
Reverse Trans to FRENCH:
by OTS-62-26906

Semiconductor Properties of Organic Dyes. II.
Trypaflavine, by A. T. Vartanian, ~~XXXXXX~~ 14 pp.
RUSSIAN, per, Zhur Fiz Khim, Vol XXIV, No 11,
1950, pp 1361-1370. 9223028

Amer Meteorol Soc

T-R: 403

NLL 7773.75 1964 (T-R-403⁺) on loan

Sci - Chem
Jul 64

263,862

CFSTI TT-64-11825

New Methods for the Measurement of the Specific
Surface (in CM^2) Pt. 1, by B.V. Deryagin,
V. I. Krylova, et al. 30 pp.
RUSSIAN, per, Zhurnal Fizicheskoi Khimii, Vol 24,
1950, pp 1371-1382.
SLA TT-64-18062

Sci/Chemistry
Jul 66

306,203

The Diffusion of Linear Polymers. I. Measurement
of the Diffusion Coefficient, by K. V. Chutov,
I. Ya. Slonim.

RUSSIAN, per, Zhur Fiz Khim, Vol XXIV, No 11,
1950, pp 1383-1389.

AEC-SCL-T-65-257

Sci-Phys
Jul 65

282,611

Letter to the Editor Concerning the Anomalous Magnetic Properties of Certain Peroxides, by A. B. Heiding, I. A. Kazarnovskii.

Full translation.

RUSSIAN, per, Zhurnal Fizicheskoi Khimii, Vol 24, 1950, pp 1407-1408

RT 2060
AEC Tr 1227

Scientific - Chemistry

The Effect of Heat Treatment on the Catalytic
Properties of Silica Gel, by V. A. Dziako.

RUSSIAN, no per, Zhur Fiz Khim, Vol XXIV, No 12,
1950, pp 1416-1419.

Research Information Service
R 704

Scientific - Chemistry

Jan 56 CRS/DEX

30,702

Theory of Electro-Reduction of Organic Compounds, by L. I. Antropov.

RUSSIAN, per, Zhur Fiz Khim, Vol XXIV, 1950, pp 1428-1436.

OSIRO

Sci - Electron, Chem
Apr 62

190,469

The Elasticity of Crystals Near the Melting
Point, by G. M. Bartenev, 8 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXIV,
No 12, 1950, pp 1437-1441.

Amer Meteorol Soc
AF Cambridge Res Center

Sci - Astron

Jan 60

106,276

OTS 61-17233

Chemical Adsorption Polarization and Cathodic Deposition of Alloys From Non-Complex Electrolytes, by M. A. Loshkarev, M. P. Grechukhina.

Full translation.

RUSSIAN, ^{MO}per, Zhur Fiz Khim, Vol XXIV, USSR, 1950, pp 1502-1510.

AEC Tr 1399

USSR
Scientific - Chemistry, polarization, alloys,
electrolytes

Oct 52 CTS/DEX

Electrochemical Behavior of Metals Under
Passivating Conditions, by Ya. M. Kolotyrkin,
V. M. Knyazheva,

RUSSIAN, per, Zhur Fiz Khim, ~~Vol. XVI~~, 1950, pp 1990-
2002.

*AEC

Sci - Phys, Chem

May 60

Electrical Conductivity, Viscosity, and Density
of Aqueous Solutions of Orthophosphoric Acid,
by S. I. Sklyarenko, I. V. Smirnov, 7 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXV, 1951,
pp 24-28.

SLA 60-17724

Sci

129,409

OTS, Vol IV, No 3

Sep 60

Contributions to the Theory of Intermediates in
Homogeneous Catalysis. III. Kinetics of the
Decomposition of K_2CrO_8 and Some New Perchromates, by
G. A. Bogdanov.

RUSSIAN, per, Zhur Fiz Khim, Vol XXV, No 1, 1951,
pp 61-70.

RLR RTS 2270 (Loan)

Sci - Chem
Feb 64

248, 282

Phase Transitions of the Second Order and the
Critical Phenomena, II., The Thermodynamics of the
Generalized Critical Phenomena, by V. K. Semchenko
UNCLASSIFIED.

RUSSIAN, Per, Zhur Fiz Khim, Vol XXV, No 1, 1951
pp 121-126.

V. K. Semchenko
~~Sci. Ex. Center~~
TT 242

Scientific - Physics

15,372

Structure Laws of Atomic Nuclea, by M. M. Venkov, 12 pp
UNCLASSIFIED

Full translation.

RUSSIAN, per, Zhur Eksper i Teoret Fiz, Vol XXI, 1951,
pp 51-58.

AEC Tr 2038

Scientific - Nuclear Physics Jun 53 CTS/DEX

3057

On the Possibility of Detecting a Centre of
Symmetry of a Crystal by X-ray Analysis, by
A. I. Kitaigorodskiy. UNCL

RUSSIAN, per, Zhur Fiz Khim, Vol XXV,
1951, pp 127, 128.

DSIR LLJ M.1032
SLA 60-13725

(loan)

Sci - Phys
Feb 60

108,408

The Theory of ~~XX~~ the Kinetics of Two Consecutive
Irreversible Reactions of the Second Order,
by A. D. Stepukhovich, L. M. Timonin

RUSSIAN, per, Zhur Fiz Khim, Vol XXV, No 2,
1951, pp 143-146.

AEC Tr 1159

Scientific - Physics

Tovbin, M. V. and Krasnova, S. I.
STABILITY OF SUPERSATURATED SALT SOLUTIONS
Bertha P. Klenova, tr. 12 Sep 62, 12p 4refs [TVA]-3994
Order from OTS, SLA, or ETC \$1.60 TT-63-24284

Trans. of Zhurnal Fizicheskoi Khimii (USSR) 1951,
v. 25 [no. 2] p. 161-169. (Abstract available)

DESCRIPTORS: *Salts, *Solutions, Stability, Tempera-
ture, Valence, Solvent action

The influence of various factors on the stability of super-
saturated solutions of a number of salts was investi-
gated. An investigation was made of the stability of
supersaturated salt solutions as a function of tempera-
ture. A study was also made of the effect of the solvent
on the stability of supersaturated salt solutions. The
results obtained support the assumption that supersatu-
rated solutions are ultramicroheterogeneous systems.
(Author)

TT-63-24284

I. Title: Supersaturated
solutions

1. Tovbin, M. V.

2. Krasnova, S. I.

III. TVA-3994

IV. Tennessee Valley
Authority, Wilson
Dam, Ala.

(Chemistry--Physical, TT,
v. 11, no. 3)

Office of Technical Services

Kinetics of Chain Decomposition of Ethane at
Pressures Above Atmospheric, by Stepankhovich, A. D.,
and Mitnikov, P. M.

RUSSIAN per, Zhurnal Fizicheskoy Khimii, 1951, Vol 25,
pp 203-211.

#2

Sci Museum Lib No 52/0545

On the Subject of Free Energy and Entropy Changes
in Reactions of Complex-Formation, by K. B.
Matzimirskiy, 8 pp.

RUSSIAN, per, Zhur Fiz, ~~Khim~~, Vol XXV, No 2, 1951,
p 221-223.

SLA R 1670

Sci

Jul58

68,821

Concerning Certain Problems of the A. M. Butlerov
Theory of Chemical Structure. II. The Chemical
Structure of Hydrocarbons and the Relationship in
the Energies of Formation, by V. M. Tatevskii.

RUSSIAN, no per, Zhur Fiz Khim, Vol XIV, 1951,
pp 241 - 254.

AEC Tr 1101

Sci - Chem

Dec 51 CTS

Calculation of the Equilibrium in Isotopic Exchange
Reactions, by V. M. Tatevskii.

Full translation.

RUSSIAN, no per, Zhur Fiz Khim, USSR, Vol XXV, No 3,
1951, pp 261-273.

ABC Tr 1434

NSR

Scientific - Physics, nuclear physics, isotopic

Nov 52 CTS/DEX

V
Application of Lemmas of Similarity to the Esti-
mation of the Vibration Spectrum of Isotopic
Molecules, by V. M. Tatevskiy. 18 pp.

RUSSIAN, no per. Zhur Fiz Khim, Vol XXV, No 3
1951, pp 274-282.

Sci Trans Center RT 3187

Scientific - Chemistry, Physics

Feb 56

31,221

Polarographic Maxima Due to the Action of an
External Electric Field, by T. I. Popova,
T. A. Kryukova.

RUSSIAN, per. Zh Fiz Khim, Vol 25, No 3, 1951,
pp 283-292.

NLL Ref: 8732 (1290)

Sci-Chem
Aug 68

361,704

178/60

(SF-1050)

Measurement of the Concentration of Oxygen Atoms
in Flames by the Use of NO, by L. V. Karmilova,
V. N. Kondrat'yev, 16 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXV, No 3, 1951,
pp 312-322.

JPRS 4073

Sci - Chem

Oct 60

127, 258

Phase Transition of the Second Order and the Critical Phenomena. III. The Specific Heat of Liquid Binary Mixtures in the Critical Region of Stratification, by V. K. Semenchenko, V. P. Skripov.

RUSSIAN, no per, Zhur Fiz Khim, Vol XXV, 1951, pp 362 - 368.

AEC Tr 1095

Sci - Chem

Dec 51 OTS

Determination of Single Electrode Potentials in
Fused Aluminum Chloride-Sodium Chloride as
Solvent, by Yu. K. Delimarskiy, L. S. Berenblyum,
I. N. Saeiko, 13 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXV, No 4,
1951, pp 39-43.

26, 111

Sci Trans Center
RT-2158

Scientific - Chemistry

Sep 55 CTS/DEX

Kinetics of the Photochlorination Reaction of Benzene, by V. A. Shushunov, G. M. Strongin, Y. I. Gryzin, A. V. Eukanov, 8 pp.

RUSSIAN, no per, Zhur Fiz Khim, Vol XXV, No 4, 1951, pp 404-408.

SLA Tr R-561

Sci - Chem
Jul 57

49,941

Characteristics of the Combustion of Mixtures of
Hydrogen and Bromine, by V. I. Kokochashvili.

RUSSIAN, ^{per} Zhur Fiz Khim, No 25, 1951, pp 444-452

*ATIC

Sci - Chem

Apr 57 CTS

178/60

(SF-1050)

Kinetics of Combustion of Carbon, by G. A.
Barskiy, Ya. B. Zel'dovich, 23 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXV, No 5,
1951, pp 523-537.

JPRS 4074

Sci - Chem

Oct 60

128,019

An Equation of the Physical State of Matter in
Partial Derivatives, by T. F. Ivanov.

RUSSIAN, per, Zhur Fiz Khim, Vol XXV, No 5,
1951, pp 538-541.

ATS RJ-1270

Sci - Phys, Chem
Apr 60

114,572

h
Absorption of Oxygen on Platinum During Polarization
by the Charging Curves, by Dr. I. Zalkind, and B. V.
Ershler.

Ts.

Full translation.

RUSSIAN, per, Zhur Fiz Khim, Vol XXV, USSR, 1951,
pp 565-576.

AEC Tr 1300

Scientific - Chemistry

Jun 52 CTS

DEX

The Determination of the Effective Coefficients
of the Vibrations of Polyatomic Molecules, I.
Effective Coefficients for Methane, Deuteromethane,
Ethane and Deuteroethanes, by P. G. Maslov, S. A.
Antipina

RUSSIAN, per. Zhur Fiz Khim, Vol. XXV, No 5, 1951,
pp 594-606.

4092

~~XXXXXXXXXXXX~~
Sci Tr Center TT 292

Scientific - Chemistry
CPS/DEX

Certain Relationships in the Kinetics of the
Oxidation of Methanol into Formaldehyde on a Silver
Catalyst, by I. N. Vlodavets, S. Ya. Peshetskiy

Full translation.

RUSSIAN, per, Zhur Fiz Khim, Vol XXV, 1951,
pp 612-623.

Scientific - Chemistry AEC Tr 1612
Jun 53 CTS/DEX

2000/11/15/150 3163
SLE 60-15848

Frisman, E. V. and Tsvetkov, V. N.
DYNAMIC BIREFRINGENCE OF LIQUIDS WITH CHAIN
MOLECULES. 11p. 10 refs. MTWL: 589.
Order from OTS or ETC \$1.55

61-17304

Trans. of Zhurnal Fizicheskoi Khimii (USSR) 1951,
v. 25, no. 6, p. 682-687.

DESCRIPTORS: Liquids, Viscosity, Solutions,
*Hydrocarbons, *Hydrodynamics.

61-17304

- I. Frisman, E. V.
- II. Tsvetkov, V. N.
- III. MTWL-589
- IV. Stichting Moelijk
Toegankelijke Wetenschap-
pelijke Literatuur

Office of Technical Services

Adsorption of Nitrogen Vapor on Silicagel at Low
Temperatures, by V. P. Dreving, A. V. Kiselev, O. A.
Likhacheva.

Full translation.

RUSSIAN, no per, Zhur Fiz Khim, Vol XXV, USSR, 1951,
~~pp 710-718~~ pp 710-718.

AEC Tr 1368

Scientific - Chemistry, Nitrogen vapor, Silicagel

Sep 52 CTR/DEX

Spectroscopic Investigation of Solutions of
Inorganic Salts in Ketones, by N. A. Slovokhotova,

RUSSIAN, per, Zhur Fiz Khim, Vol XXV, No 7, 1951,
pp 768-778. CIA 9004655

TIL No 4772

Sci - Chemistry

48,474

500 1000 1500 2000 2500 3000 3500 4000 4500 5000 5500 6000 6500 7000 7500 8000 8500 9000 9500 10000

The Symmetric Electrization on Drops With
Mechanical Atomization of Liquids, by
G. I. Natanson, 23 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXV, No 7,
1951, pp 779-790. 9672404

FID HCL-1324/1

Sci - Phys

180, 194

23 Jan 62

The Determination of the Effective
Coefficients of the Vibrations of Polyatomic
Molecules. 2. The Potential Energy Constants
of Halogen Substituted Methane, by P. G. Maslov,
22 pp.

Full translation.

RUSSIAN, per, Zhur. Fiz. Khim, Vol XXV,
1951, pp 803-813.

TT-301
AEC - TT-301

8467

Scientific - Chemistry Dec 53 CTS/DEX

The Determination of the Effective Coefficients of the Vibrations of Polyatomic Molecules. III. The Relationship Between the Effective Coefficients and the Other Parameters of the Molecule, by P. G. Maslov.

Full translation.

RUSSIAN, ^{Mo/}per, Zhur Fiz Khim, Vol. XXV, USSR, 1951, pp 814-822.

AEO TR 1401

USSR

Scientific - Chemistry, vibrations, molecules

Oct 52 CTS/DBX

Kinetics of Polymerization of Vinyl Chloride
in Solution under the Action of Benzoyl
Peroxide, by G. V. Tsachenko
RUSSIAN, PER, Zh. fiz. khim. Vol 25, 1951,
pp 823-836.
NLL Ref: 5828.4F (5994)

Sci-Mat
Aug 68

362,142

THE FIVE YEAR REPORTS ON THE
ECONOMIC SITUATION OF CHINA, BY
S. A. [REDACTED] [REDACTED] [REDACTED]

THE FIVE YEAR REPORTS ON THE
ECONOMIC SITUATION OF CHINA, VOL. XXV, NO. 7,
1991, P. 100-102

OTS 60-17470
NLE M.3380
YEAR: 1991 NO. 3380

[REDACTED] (1.1, 1.2, 1.3, 1.4)

ONE - [REDACTED]
TWO - [REDACTED]

108,409

Mechanism of Reduction of Iron Oxides With Hydrogen,
Carbon Monoxide, and Mixtures of These Gases, by V. A.
Roiter, V. A. Yuza, A. N. Kuznetsov, UNCLASSIFIED.

RUSSIAN, per, Zhur Fiz Khim, Vol XXV, No 8, 1951, pp 960-
970.

Brutcher Tr No 3313

17,357

Scientific - Min/Metals

Structure and Mechanism of Formation of Lustrous
Electrolytic Deposits, by K. M. Gorbunova, T. V.
Ivanovskaya, N. A. Shishakov,

RUSSIAN, per, Zhur Fiz Khim. Vol XIV, No 8,
1951, pp 981-987.

Insdoc
Natl Physical Laboratory of India,
Hillside Road, New Delhi-12, India.

Sci - Chemistry

37,176

Aug 1956

zhur I. I. Khim. Voe XXV, # 8, (1951) - pp 988-991

Resolution of Conference on Theory of Chemical
Structure of Organic Compounds, Moscow, 14 Jun
51.

proj 10213

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Blum.

SR 15 Jun 52

Physical Idealism of the Resonance Theory
of the Hydrogen Bond, by M. I. Batuev.
RUSSIAN, per, Zhur Fiz Khim, Vol XXV, No 8,
1951, pp 995-1000.

HEW NIH No ~~S-48866~~

5-45-66

CFSTI TT-66-61757

Sci - Phys

Jun 66

302,389

Certain Regularities Regarding the Prediction of
the Type of the Phase Diagram of Binary Systems,
by S. D. Gromkov, 17 pp.

Full translation.

RUSSIAN, Zhur Fiz Khim, 1951, Vol XXV, No 9,
pp 1014-1025.

Sci Mus Lib No 52/3249

Scientific - Chemistry

27 December 1952

Role of Alkali in Color Development, by G. P.
Bierman, N. N. Shichkina, 14 pp. UNCLASSIFIED.

RUSSIAN, per, Zh Fiz Khim, USSR, Vol XXV, No 9,
1951, pp 1026-1032.

CIA/FDD/X 1427

19,068

Scientific - Physics

Electron Levels of Atoms Adsorbed on the Surface
of a Crystal, Part II, by V. L. Bonch-Bruевич,
14 pp

RUSSIAN, per, Zhur Fiz Khim, Vol XIV, No 9,
1951, pp 1033-1042.

23, 3/2

Sci Ma Lib No 54/3426

Scientific - Physics May 55 CTS

The Relationship Between Solubility, Coefficient
of Activity and Properties of Particles Constitut-
ing a Solution, by M. I. Shakhparonov.

RUSSIAN, per, Zhur Fiz Khim, Vol XXV, 1951, pp
1103-1110.

AEC Tr 2824

Sci - Physics

SLA R-1984
45,102

Mar 57/CTS

Series of Voltages for Heavy Colored Metals
and their Sulfides in Fused Chlorides of Alkaline
Metals, by S. I. Remtel (S. E. Rennel), I. N.
Ozeryanya (E. N. Ozeryanga), 10 pp.

RUSSIAN, no per, Zhur Fiz Khim, Vol XXV, 1951,
pp 1181-1185.

AEC Tr 3000

SLA R-1762

52, 454

Sci - Min/met; Physics

Sep 57

Modification of Catalysts, by F. F. Vol'henshtein,
24 pp.

RUSSIAN, no per, Zhur Fiz Khim, Vol XXV, No 10, 1951,
pp 1214-1227.

36,115
Sci Tr Center BT-3658

Scientific - Chemistry

Jun 56/dex

Quenching of β -naphthylamine Vapor Fluorescence
by Foreign Gases, by B. S. ~~Kapustin~~ Neporent,
26 pp.

RUSSIAN, ~~Kper~~, Zhur Fiz Khim, Vol XXI, No 10,
1947, pp 1111-1124.

Sci Ma Lib No 54/2521

Not in Resh IB TT442

Scientific - Chemistry

19,125

Geguzin, Ya. Ye. and Pines, B. Ya.
MIXING ENERGY OF BINARY METAL-LIC ALLOYS.
I. LEAD-TIN SYSTEM. [1961] 15p. 12 refs.
Order from MDF \$9.00

MDF G-198

Trans. of Zhurnal Fizicheskoy Khimii (USSR)
1951, v. 25, no. 10, p. 1228-1233.

(Metallurgy, TT, v. 5, no. 11)

61-22109

1. Lead-tin alloys--Phase studies
2. Title: Mixing energy
- I. Geguzin, Ya. Ye.
- II. Pines, B. Ya.
- III. MDF G-198
- IV. Friedman, Morris D., Inc.,
West Newton, Mass.
- V. Title: Lead-Tin ...

Office of Technical Services

Geguzin, Ya. Ye. and Pines, B. Ya.
MIXING ENERGY OF BINARY METALLIC ALLOYS.
II. BISMUTH-CADMIUM SYSTEM. [1961] 7p. 6 refs.
Order from MDP \$4.50 MDP G-199

Trans. of Zhurnal Fizicheskoy Khimii (USSR)
1951, v. 25, no. 11, p. 1300-1305.

(Metallurgy, TT, v. 5, no. 11)

61-22110

1. Bismuth-cadmium alloys--
Phase studies
2. Title: Mixing energy
I. Geguzin, Ya. Ye.
II. Pines, B. Ya.
- III. MDP G-199
- IV. Friedman, Morris D., Inc.,
West Newton, Mass.
- V. Title: Bismuth-Cadmium...

159093

Order from MDP \$4.50

Shurnovskaya, N.A., Bruns, B.P. and
Me'nikova, Z.Ya.

REACTION ENTRE L'OXYDE DE CARBONE ET L'E-
BIOXYDE DE MANGANESE (Reaksiya Mezhdz Okis-
yu Ugleroda i Dvokh isyu Margantsa) (Reaction Be-
tween Carbon Monoxide and Manganese Dioxide).
19p. (foreign text included) 17 refs. CNRS-VIII bis 86.
Order from OIS, IETC or CNRS 51,60 TT-62-28757

Trans. in French of Zhurnal Fizicheskoi Khimii
(USSR) 1951, v.25, no.11, p.1306-1312.

DESCRIPTORS: *Manganese, *Dioxides, Carbon
compounds, Oxides, Surface properties, Chemical
reactions.

(Chemistry--Physical, TT, v. 11, no. 8)

TT-62-28757

I. Shurnovskaya, N.A.

II. Bruns, B.P.

III. Me'nikova, Z.Ya.

IV. CNRS-VIII bis 86

V. Centre National de la Recher-
che Scientifique, Paris

Office of Technical Services
European Translations Centre

Thermodynamics of Concentrated Solutions of Strong
Electrolytes, by I. A. Mirtskhulava, 20 pp.

Full translation.

RUSSIAN, per, Zhur Fiz Khim, No. 25, 1951, pp 1347-X
1354.

~~CIA/FDD/X-1284~~
~~Dept. Telephone Laboratory, Tr. 1151 (NS)~~

Scientific - Physics Aug 53 CTS/DEX

4108

Experimental Study of the Surface Tension of
Metallic Solutions. I. Temperature Dependence
of the Surface Tension of Mercury and of Sodium-
and Potassium Amalgams, by P. P. Pugachevich, 22 pp.

RUSSIAN, no per, Zhur Fiz Khim, Vol XXV, No 11,
1951, pp 1365-1373.

Sci Tr Center
RT-2181

Scientific - Chemistry
CIS 70/Jul 55

25,223

The Theory of the Thermodynamic Properties of Solutions III. Semenchenko Rule, by M. I. Shakhperonov, 14 pp.

RUSSIAN, per, ZhurFiz Khim, Vol XXV, 1951, pp 1374-1383.

SLA R-2830

Sci

Jul 59

92, 432

Geguzin, Ya. Ye. and Pines, B. Ya.
MIXING ENERGY OF BINARY METALLIC ALLOYS.
III. BISMUTH-ANTIMONY SYSTEM. [1961] 6p.
6 refs.

Order from MDF \$4.00

MDF G-200

Trans. of Zhurnal Fizicheskoy Khimii (USSR)
1952, v. 26, no. 1, p. 27-30.

61-22111
1. Antimony-bismuth alloys--
Phase studies

2. Title: Mixing energy

1. Geguzin, Ya. Ye.

II. Pines, B. Ya.

III. MDF G-200

IV. Friedman, Morris D., Inc.,
West Newton, Mass.

V. Title: Bismuth-Antimony ...

100115

Office of Technical Services

(Metallurgy, TT, v. 5, no. 11)

Thermodynamics of Concentrated Solutions of Strong
Electrolytes, Part II, by I. A. Mirtskhulava, 19 pp.

Full translation.

RUSSIAN, per, Zhur Fiz Khim, No 46, 1952, pp 39-47.

~~Best Telephone Laboratory Tr A152 (M)~~

Scientific - Physics

Aug 53 CTS/DEX

4109

The Mechanism of the Action of Optical Radiation of an Anodically Oxidised Lead Electrode,
by V. I. Ginsburg, V. I. Veselovskiy, 15 pp.

RUSSIAN, per, Zhur Fiz Khim, 1952, Vol XXVI,
No 1, pp 60-71.

ATS-88128R

Sci - Chem
OTS I, 12
Jul 59

92, 264

On the Structure of Carbon Formed During the
Thermal Decomposition of Carbon Monoxide in
Contact With Iron, by L. V. Radushkevich,
V. M. Luk'yanov.

RUSSIAN, por. Zhur Fiz Khim, Vol LXVI, 1952,
pp 88-95.

JPRS

Dept of Int

US Bur of Mines

Central Exper Sta

Pitts., Pa. Tr 327

Sci + Chem, Engr

Jun 59

89, 591

Electronographic Study of Hydroxide Films on Metals
(magnesium, aluminum, iron and copper), by N. A.
Shishakov.

RUSSIAN, per, Zhurnal Fizicheskoi Khimii, Vol XXVI, No 1,
1952, pp 106-111.

Assoc Tech Svc

~~Sci Tech Center~~

RJ-167

0125M

- 1681

17,448

Scientific - Chemistry

Steric Factors in Unimolecular and Bimolecular Reactions, by A. D. Stepukhovich, L. M. Timonin.

Full translation.

RUSSIAN, per, Zhur Fiz Khim, Vol XXVI, USSR, 1952, pp 145-155.

AEC Tr 1486

CIA/FDD-X-4703

Scientific - Chemistry, unimolecular, bimolecular

Jan 53 CTS/DEX

*Smithsonian Institution
Smithsonian Institution Library
Washington, D.C.*

The Dynamics of Desorption From Solutions, by
M. B. Tovbin, A. D. Greenburg, 17 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXVI, 1952,
pp 156-164.

AEC Tr 3165

Sci - Chem

May 58

62,698

Photoelectrochemical Process in a Microheterogeneous
Sensitizing System: Suspension of ZnO/Solution, by
V. I. Veselovskiy, D. M. Shub.

RUSSIAN, per, Zhur Fiz Khim, Vol XXVI, No 1, 1952,
pp 509-519.

NLL N. 3069

Sci - Chem

Feb 62

186, 845

Geguzin, Ya. Ye. and Pines, B. Ya.
MIXING ENERGY OF BINARY METALLIC ALLOYS.
IV. BISMUTH-TIN AND BISMUTH-LEAD SYSTEMS.
[1951] 10p. 7 refs.
Order from MDF \$6.00

MDF G-201

Trans. of Zhurnal Fizicheskoy Khimii (USSR)
1952, v. 26, no. 2, p. 165-172.

(Metallurgy, TT, v. 5, no. 11)

61-22112

1. Bismuth-lead alloys--Phase studies
2. Bismuth-tin alloys--Phase studies
3. Title: Mixing energy
- I. Geguzin, Ya. Ye.
- II. Pines, B. Ya.
- III. MDF G-201
- IV. Friedman, Morris D., Inc.,
West Newton, Mass.
- V. Title: Bismuth-Tin ...

1951

Office of Technical Services

On the Theory of Decomposition of Amalgams by
Solutions of Electrolytes, by O. L. Kaptan,
Z. A. Iofa, 15 pp.

RUSSIAN, 6 mo per, Zhur Fiz Khim, Vol XXVI, 1952,
pp 193-200. *214 1-12317*

AEC Tr 1715

Scientific - Chemistry

CTS/DEX

7303

Decomposition of Amalgams and Overvoltage of Hydrogen
on Mercury in Alkaline Solutions, by O. L. Kaptan,
Z. A. Iofa.

RUSSIAN, no per, Zhur Fiz Khim, Vol XXVI, 1952,
pp 201-210.

Aec Tr 1716

Scientific - Chemistry

CTS/DEX

7339

Kinetics of the Cathodic Reduction of Oxygen, by
A. I. Krasil'shchikov,

RUSSIAN, per, Zhur Fiz Khim, Vol XXVI, No 2, 1952,
pp 216-223.

Sci Mus Lib ~~Box~~ 54/1374

Scientific - Chemistry

Aug 54 CTS

16,787

Boraskov, G. K. and Slin'ko, M. G.
DE KINETICA VAN OMKEERBARE KATALYTISCHE
REACTIES IN HET GEBIED VAN INWENDIGE DIFFU-
SIE (Kinetics of reversible catalytic reactions in the
internal diffusion range). 10p. 3 refs. MTWL: 694.
(Text in Dutch).
Order from OTS or EIC SI, 55

61-17337

Trans. of Zhurnal Fizicheskoi Khimii (USSR) 1952,
v. 26, p. 235-238.

DESCRIPTORS: Diffusion. *Catalysis, Porous materi-
als, Catalysts.

61-17337

- I. Boraskov, G. K.
- II. Slin'ko, M. G.
- III. MTWL: 694
- IV. Stichting Moellijk
Toegankelijke Wetenschap-
pelijke Literatuur

Office of Technical Services

Adsorption of Mixtures of Gases. Part 1.
Adsorption of Ethylene and Carbon Dioxide on
Activated Carbon, by B. P. Berin, V. V.
Serpinskiy.

RUSSIAN, no per, Zhur Fiz Khim, Vol XXVI, 1952,
pp 253-269.

Assoc Tech Sv RJ-206
\$24.95

Scientific - Chemistry
CTB 73/Oct 1955

2076-57
27,470

Reasons for the Formation of Zinc Sponge
on the Cathode and Mechanism of Action of
Impurities in Zincate Electrolytes, by

N. T. Kudryavtsev.

RUSSIAN, per, Zhurnal Fizicheskoy Khimiy,
Vol 26, No 2, 1952, pp 269-281.

Dept of Navy NIC 2838

Sci-Chem

June 69

383,172

Gogoberidze, D. B.

THEORY OF THE PENDULUM METHOD FOR
MEASURING HARDNESS (K Teorii Mayatnikovogo Me-
toda Izmereniy Tverdosti). [1962] [14p. (foreign
text included) 17 refs.

Order from OTS or SLA \$1.60

62-14559

Trans. of Zhurnal Fizicheskoi Khimii (USSR) 1952,
v. 26, no. 2, p. 310-314.

DESCRIPTORS: *Hardness, Measurement, Theory,
Test equipment, *Instrumentation.

It is shown that the values of hardness, as measured
according to P. A. Rebinder and V. D. Kuznetsov, are
not constant for a given material, but do change de-
pending on the criterion that is applied for the estimate
of hardness as well as on the weight of pendulum and
the shape of its supports. Hardness, according to
V. D. Kuznetsov, and hardness, according to
(Physics, TT, v. 8, no. 10)

(over)

62-14559

1. Title: Pendulum method
1. Gogoberidze, D. B.

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